

## **INTERESTED IN DAMA?**

If your organization is interested in the DAMA test facility, its capabilities and functions, or to obtain a cost estimate to conduct a test, please contact the following :

*DSN 821-0150  
(520) 533-0150*

*DAMA Certification Register:*  
<http://jrtc.fhu.disa.mil/reg/dama1.html>

*DAMA Test Facility Homepage:*  
<http://jrtc.fhu.disa.mil/reg/uhfdama.htm>



## **ULTRAHIGH FREQUENCY (UHF) DEMAND ASSIGNED MULTIPLE ACCESS (DAMA) TEST FACILITY**



## **Joint Interoperability Test Command**

Attn: Visitor Support Center  
P.O. BOX 12798  
Fort Huachuca, AZ 85670-2798

Phone: 1-800-LET-JITC  
<http://jrtc.fhu.disa.mil>

*Increasing Combat Effectiveness  
Through Interoperability*

## **Joint Interoperability Test Command**

## **GENERAL INFORMATION**

The Joint Interoperability Test Command (JITC) is the Defense Information Systems Agency's test organization responsible for the interoperability and standards conformance certification testing of all Command, Control, Communications, Computer, and Intelligence systems. Following the release of the Chairman Joint Chiefs of Staff Instruction (CJCSI) 6251.01A in April 2003, the JITC developed and implemented the capability to provide Military Standards (MIL-STD)-188-181, -182, and -183 conformance testing to enable certifying systems to those Military Standards (MIL-STDs) per the CJCSI. The JITC provides these test services to Service, Agency, and commercial vendor customers on a cost reimbursable basis.

The Demand Assigned Multiple Access (DAMA) Ultrahigh Frequency (UHF) Test Facility is the JITC functional component that is responsible for MIL-STD conformance testing of all UHF Satellite Communications terminal systems. The test facility is located within the Joint Test Facility compound at the JITC, Fort Huachuca, Arizona. Fort Huachuca is located in Sierra Vista, which is approximately 70 miles southeast of Tucson.

## **TEST CAPABILITIES**

The DAMA Test Facility tests terminals for conformance to the following MIL-STDs:

- ◆ MIL-STD-188-181/A/B, Interoperability Standard for Dedicated 5-kHz and 25-kHz UHF Satellite Communications Channels
- ◆ MIL-STD-188-182/A, Interoperability Standard for 5-kHz UHF DAMA Terminal Waveform
- ◆ MIL-STD-188-183/A, Interoperability Standard for 25-kHz UHF TDMA/DAMA Terminal Waveform

We can tailor testing support to meet customer requirements. The scope of testing can range from "Quick Look" verifications of specific MIL-STD requirements to assist equipment vendors with their developmental

testing process, to full compliance testing of any/all of the CJCSI mandated MIL-STDs. Once testing has demonstrated a terminal meets all the requirements of a particular MIL-STD, JITC publishes a certification letter to document that fact. After a terminal has been certified to comply with each of the mandated MIL-STDs, JITC will then issue a separate document that certifies the terminal conforms to the requirements of CJCSI 6251.01A. This final conformance letter is commonly referred to as a "Fourth Letter Certification". Terminals will not be issued a Terminal Base Address by the address controlling authority until the terminals have received the Fourth Letter Certification. Therefore, the Fourth Letter Certification is usually the ultimate goal of all test events.



## **TEST LAB**

The test lab is equipped with a broad assortment of precision measuring equipment, input/output devices, cryptographic devices, radio terminals, satellite simulators, a DAMA Orderwire Processor, and DAMA Semi-Automatic Controller to enable testing and verifying compliance with the myriad of MIL-STD conformance requirements. The SAC is a mirror image of the UHF DAMA network control systems currently fielded at the four Joint UHF Military Satellite Communications Network Integration control stations. Conformance testing is accomplished on three test benches — one each for MIL-STD-188-181, -182, and -183. Because testing is sub-divided amongst three test benches, multiple terminals can undergo test simultaneously.

Tests are conducted by a team of highly trained and experienced support contractors, using a standard set of test procedures developed for each MIL-STD. Copies of the test procedures in Adobe Acrobat .pdf format are available upon request.

Normally, customers provide all terminal equipment for testing. However, the lab does possess an assortment of terminals to support in-house interoperability testing as well as ad hoc warfighter operational scenario testing. The lab is equipped with multiple PSC-5s, a PRC-117F, multiple TD-1271/WSC-3s, and a pair of MD-1324/RT-1771s. Additional radios will be procured in the future to support Joint Tactical Radio System (JTRS) test support requirements.

## **LAB UPGRADES**

We continuously upgrade the facility to enable testing to keep pace with satellite modem and receiver/transmitter technology developments, as well as MIL-STD revisions. The most recent upgrade provided a much-improved multi-hop (communications across multiple satellite footprints) test capability within the lab environment.

